

## CLAIMS

We claim:

5

1. A method for providing voice communications over a packet-based data communication network, comprising:

receiving a call request;

determining whether a total delay for the requested call would exceed a

10 predetermined maximum delay if a packetization delay component is increased for packets in the requested call; and

in the event that the packetization delay can be increased without the total delay exceeding the maximum delay, increasing a size of packets used in the call.

15 2. The method of claim 1, wherein said determining whether said total delay would exceed said predetermined maximum delay is responsive to stored information in a call server system indicating whether a called party phone is local to a calling party phone.

3. The method of claim 1, wherein said determining whether said total delay would  
20 exceed said predetermined maximum delay is responsive to a directory number of a calling party phone and a directory number of a called party phone.

4. The method of claim 1, further comprising determining whether a calling party phone and a called party phone can process an increased packet size, and only increasing said size of packets used in the call in the event that both said calling party phone and said called party phone can process said increased packet size.

5

5. The method of claim 1, wherein said increasing said size of packets used in said call comprises increasing said size of packets used in said call to a packet size above a default packet size.

10 6. The method of claim 1, further comprising determining whether a phone terminating said requested call is being used through a virtual private network, and, in the event that said phone terminating said requested call is being used through a virtual private network, using a default size of packets for said requested call.

15 7. The method of claim 1, wherein said maximum delay is a value that cannot be exceeded without adversely impacting the voice quality of the call.

8. A system for providing voice communications over a packet-based data communication network, comprising:

20 request processing logic operable to receive a call request;

delay determining logic operable to determine whether a total delay for the requested call would exceed a predetermined maximum delay if a packetization delay component is increased for packets in the requested call; and

packet size increasing logic, operable in the event that the packetization delay can  
5 be increased without the total delay exceeding the maximum delay, to increase a size of packets used in the call.

9. The system of claim 8, wherein said delay determining logic is further operable to determine whether said total delay would exceed said predetermined maximum delay  
10 responsive to stored information in a call server system indicating whether a called party phone is local to a calling party phone.

10. The system of claim 8, wherein said delay determining logic is further operable to determine whether said total delay would exceed said predetermined maximum delay  
15 responsive to a directory number of a calling party phone and a directory number of a called party phone.

11. The system of claim 8, wherein said delay determining logic is further operable to determine whether a calling party phone and a called party phone can process an  
20 increased packet size, and wherein said packet size increasing logic is only operable to increase said size of packets used in the call in the event that both said calling party phone and said called party phone can process said increased packet size.

12. The system of claim 8, wherein said packet size increasing logic is further operable to increase said size of packets used in said call by increasing said size of packets used in said call to a packet size above a default packet size.

5

13. The system of claim 8, wherein said delay determining logic is further operable to determine whether a phone terminating said requested call is being used through a virtual private network, and, wherein said packet size increasing logic is only operable to increase said packet size for said call in the event that said phone terminating said

10 requested call is not being used through a virtual private network.

14. The system of claim 8, wherein said maximum delay is a value that cannot be exceeded without adversely impacting the voice quality of the call.